

Abstract of the Disclosure

The increasing use of electrically powered vehicles has created a need for inexpensively and effectively measuring high currents for motor control, as for example digital motor control. Because the high
5 operating voltages of traction motors, the motor current sensors should be non-contacting. A non-contacting current sensor having a rated capacity significantly less than the motor winding current is coupled to one or more of the
10 conductors of a paralleled multiconductor motor winding for sensing the current in that conductor. The paralleled electrical motor conductors are paralleled by additional similar conductors, so that only a fraction of the current to be measured flows through the conductor(s) associated
15 with the sensor. The current sensor elements may be mounted on a pc board, which supports the elements, and also has one or more printed patterns which define conductors associated with the sensor.